



# TORO Analysis of Sawing Machine Setters, Operators, and Tenders, Wood to Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

## INPUT SECTION:

Transfer	Title	O*NET	Filters		
From Title:	Sawing Machine Setters, Operators, and Tenders, Wood	51-7041.00	Abilities:	Importance Level: 50	Weight: 1
To Title:	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	51-9041.00	Skills:	Importance Level: 69	Weight: 1
Labor Market Area:	Maine Statewide		Knowledge:	Importance Level: 69	Weight: 1

## OUTPUT SECTION:

Grand TORQ:

90

Ability TORQ		Skills TORQ		Knowledge TORQ	
Level	86	Level	92	Level	90

Gaps To Narrow if Possible				Upgrade These Skills				Knowledge to Add			
Ability	Level	Gap	Impt	Skill	Level	Gap	Impt	Knowledge	Level	Gap	Impt
Auditory Attention	50	16	56	Active Listening	50	5	72	No Knowledge Upgrades Required!			
Rate Control	46	12	72	Troubleshooting	53	5	72				
Perceptual Speed	50	9	65	Operation Monitoring	57	4	76				
Visualization	53	11	53	Operation and Control	55	2	74				
Far Vision	46	9	62	Equipment Maintenance	58	1	69				
Reaction Time	51	7	65								
Hearing Sensitivity	42	8	56								
Static Strength	46	7	53								
Finger Dexterity	48	6	59								
Information Ordering	46	5	56								
Selective Attention	46	5	56								
Manual Dexterity	46	4	59								
Speech Recognition	41	4	56								
Visual Color Discrimination	37	2	53								
Speech Clarity	37	2	53								
Deductive Reasoning	41	2	50								



Depth Perception	42	1	53
Trunk Strength	42	1	50

LEVEL and IMPT (IMPORTANCE) refer to the Target Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders. GAP refers to level difference between Sawing Machine Setters, Operators, and Tenders, Wood and Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders.

## ASK ANALYSIS

### Ability Level Comparison - Abilities with importance scores over 50

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Importance
Rate Control	34	46	72
Perceptual Speed	41	50	65
Reaction Time	44	51	65
Arm-Hand Steadiness	48	44	62
Far Vision	37	46	62
Manual Dexterity	42	46	59
Finger Dexterity	42	48	59
Control Precision	50	46	59
Multilimb Coordination	46	46	59
Near Vision	46	46	59
Problem Sensitivity	42	42	56
Information Ordering	41	46	56
Selective Attention	41	46	56
Hearing Sensitivity	34	42	56
Auditory Attention	34	50	56
Speech Recognition	37	41	56
Visualization	42	53	53
Static Strength	39	46	53
Visual Color Discrimination	35	37	53
Depth Perception	41	42	53
Speech Clarity	35	37	53
Oral Comprehension	48	46	50
Oral Expression	48	44	50
Deductive Reasoning	39	41	50
Category Flexibility	41	37	50
Trunk Strength	41	42	50
Stamina	35	34	50

### Skill Level Comparison - Abilities with importance scores over 69

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Importance
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Operation Monitoring	53	57	76
Operation and Control	53	55	74
Active Listening	45	50	72
Troubleshooting	48	53	72
Equipment Maintenance	57	58	69
Knowledge Level Comparison - Knowledge with importance scores over 69			
Description	Sawing Machine Setters, Operators, and Tenders, Wood	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Importance

Experience & Education Comparison				
Related Work Experience Comparison			Required Education Level Comparison	
Description		Sawing Machine Setters, Operators, and Tenders, Wood	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	
10+ years	1%	<div><div></div></div>	4%	<div><div></div></div>
8-10 years	0%	<div><div></div></div>	0%	<div><div></div></div>
6-8 years	0%	<div><div></div></div>	0%	<div><div></div></div>
4-6 years	0%	<div><div></div></div>	0%	<div><div></div></div>
2-4 years	8%	<div><div></div></div>	4%	<div><div></div></div>
1-2 years	11%	<div><div></div></div>	28%	<div><div></div></div>
6-12 months	13%	<div><div></div></div>	44%	<div><div></div></div>
3-6 months	12%	<div><div></div></div>	0%	<div><div></div></div>
1-3 months	12%	<div><div></div></div>	0%	<div><div></div></div>
0-1 month	11%	<div><div></div></div>	0%	<div><div></div></div>
None	29%	<div><div></div></div>	18%	<div><div></div></div>
Sawing Machine Setters, Operators, and Tenders, Wood			Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	
Most Common Educational/Training Requirement:				
Moderate-term on-the-job training			Moderate-term on-the-job training	
Job Zone Comparison				
2 - Job Zone Two: Some Preparation Needed			2 - Job Zone Two: Some Preparation Needed	
Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.			Some previous work-related skill, knowledge, or experience may be helpful in these occupations, but usually is not needed. For example, a teller might benefit from experience working directly with the public, but an inexperienced person could still learn to be a teller with little difficulty.	
These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.			These occupations usually require a high school diploma and may require some vocational training or job-related course work. In some cases, an associate's or bachelor's degree could be needed.	
Employees in these occupations need anywhere from a few months to one year of working with experienced employees.			Employees in these occupations need anywhere from a few months to one year of working with experienced employees.	



## Tasks

### Sawing Machine Setters, Operators, and Tenders, Wood

#### Core Tasks

##### Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Inspecting Equipment, Structures, or Material - Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.
- Performing General Physical Activities - Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.
- Monitor Processes, Materials, or Surroundings - Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.

#### Specific Tasks

##### Occupation Specific Tasks:

- Adjust bolts, clamps, stops, guides, and table angles and heights, using hand tools.
- Adjust saw blades, using wrenches and rulers, or by turning handwheels or pressing pedals, levers, or panel buttons.
- Clear machine jams, using hand tools.
- Count, sort, and stack finished workpieces.
- Cut grooves, bevels, and miters, saw curved or irregular designs, and sever or shape metals, according to specifications or work orders.
- Dispose of waste material after completing work assignments.
- Examine blueprints, drawings, work orders, or patterns to determine equipment set-up and selection details, procedures to be used, and dimensions of final products.
- Examine logs or lumber in order to plan the best cuts.
- Guide workpieces against saws, saw over workpieces by hand, or operate automatic feeding devices to guide cuts.
- Inspect and measure workpieces to mark for cuts and to verify the accuracy of cuts, using rulers, squares, or caliper rules.

### Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

#### Core Tasks

##### Generalized Work Activities:

- Controlling Machines and Processes - Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).
- Identifying Objects, Actions, and Events - Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.
- Handling and Moving Objects - Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.
- Getting Information - Observing, receiving, and otherwise obtaining information from all relevant sources.
- Communicating with Supervisors, Peers, or Subordinates - Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.

#### Specific Tasks

##### Occupation Specific Tasks:

- Activate machines to shape or form products such as candy bars, light bulbs, balloons, or insulation panels.
- Adjust machine components to regulate speeds, pressures, and temperatures, and amounts, dimensions, and flow of materials or ingredients.
- Clean dies, arbors, compression chambers, and molds, using swabs, sponges, or air hoses.
- Clear jams, and remove defective or substandard materials or products.
- Complete work tickets, and place them with products.
- Couple air and gas lines to machines to maintain plasticity of material and to regulate solidification of final products.
- Disassemble equipment to repair it or to replace parts such as nozzles, punches, and filters.
- Examine, measure, and weigh materials or products to verify conformance to standards, using measuring devices such as templates, micrometers, or scales.
- Feed products into machines by hand or conveyor.
- Ignite burners to preheat products, or use torches to apply heat.



- Inspect stock for imperfections and to estimate grades or qualities of stock or workpieces.
- Lubricate and clean machines, using wrenches, grease guns, and solvents.
- Measure and mark stock for cuts.
- Monitor sawing machines, adjusting speed and tension and clearing jams to ensure proper operation.
- Mount and bolt sawing blades or attachments to machine shafts.
- Operate panelboards of saw and conveyor systems to move stock through processes, and to cut stock to specified dimensions.
- Position and clamp stock on tables, conveyors, or carriages, using hoists, guides, stops, dogs, wedges, and wrenches.
- Pull tables back against stops, and depress pedals to advance cutterheads that shape stock ends.
- Select saw blades, types and grades of stock, and cutting procedures to be used, according to work orders or supervisors' instructions.
- Set up, operate, or tend saws and machines that cut or trim wood to specified dimensions, such as circular saws, band saws, multiple-blade sawing machines, scroll saws, rip saws, and crozer machines.
- Sharpen blades or replace defective or worn blades and bands, using hand tools.
- Trim lumber to straighten rough edges and remove defects, using circular saws.
- Unclamp and remove finished workpieces from tables.
- Unload and roll logs from trucks to sawmill decks or to carriages, or move logs in ponds, using pike poles.

#### Detailed Tasks

##### Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- examine products or work to verify conformance to specifications
- fell or buck trees
- grade, classify, or sort products according to specifications
- inspect machinery or equipment to determine adjustments or repairs needed
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into

- Install, align, and adjust neck rings, press plungers, and feeder tubes.
- Measure arbors and dies to verify sizes specified on work tickets.
- Measure, mix, cut, shape, soften, and join materials and ingredients such as powder, cornmeal, or rubber in order to prepare them for machine processing.
- Monitor machine operations and observe lights and gauges in order to detect malfunctions.
- Move materials, supplies, components, and finished products between storage and work areas, using work aids such as racks, hoists, and handtrucks.
- Notify supervisors when extruded filaments fail to meet standards.
- Pour, scoop, or dump specified ingredients, metal assemblies, or mixtures into sections of machine prior to starting machines.
- Press control buttons to activate machinery and equipment.
- Record and maintain production data such as meter readings, and quantities, types, and dimensions of materials produced.
- Remove materials or products from molds or from extruding, forming, pressing, or compacting machines, and stack or store them for additional processing.
- Remove molds, mold components, and feeder tubes from machinery after production is complete.
- Review work orders, specifications, or instructions to determine materials, ingredients, procedures, components, settings, and adjustments for extruding, forming, pressing, or compacting machines.
- Select and install machine components such as dies, molds, and cutters, according to specifications, using hand tools and measuring devices.
- Send product samples to laboratories for analysis.
- Swab molds with solutions to prevent products from sticking.
- Synchronize speeds of sections of machines when producing products involving several steps or processes.
- Thread extruded strips through water tanks and hold-down bars, or attach strands to wires and draw them through tubes.
- Turn controls to adjust machine functions, such as regulating air pressure, creating vacuums, and adjusting coolant flow.

#### Detailed Tasks



• load or unload material or workpiece into machinery

- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- measure, weigh, or count products or materials
- move or fit heavy objects
- operate hoist, winch, or hydraulic boom
- operate woodworking equipment/machinery
- read blueprints
- read specifications
- read technical drawings
- read work order, instructions, formulas, or processing charts
- recognize wood species characteristics
- set up production equipment or machinery
- sort manufacturing materials or products
- understand technical operating, service or repair manuals
- use chain saws
- use fire suppression equipment
- use hand or power tools
- use precision measuring tools or equipment

#### Detailed Work Activities:

- adjust production equipment/machinery setup
- clean equipment or machinery
- collect samples for testing
- confer with engineering, technical or manufacturing personnel
- construct molds
- examine products or work to verify conformance to specifications
- install equipment or attachments on machinery or related structures
- load or unload material or workpiece into machinery
- load, unload, or stack containers, materials, or products
- maintain consistent production quality
- maintain or repair industrial or related equipment/machinery
- maintain production or work records
- measure, weigh, or count products or materials
- mix paint, ingredients, or chemicals, according to specifications
- monitor production machinery/equipment operation to detect problems
- operate chemical processing equipment
- operate food processing production equipment/machinery
- operate glass or stone working equipment/machinery
- operate hoist, winch, or hydraulic boom
- operate metal or plastic fabricating equipment/machinery
- operate pulp or paper making equipment
- operate woodworking equipment/machinery
- read specifications
- read work order, instructions, formulas, or processing charts
- set up production equipment or machinery
- test manufactured products or materials
- use hand or power tools
- use precision measuring tools or equipment

### Labor Market Comparison

Description	Sawing Machine Setters, Operators, and Tenders, Wood	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	Difference
Median Wage	\$ 24,790	\$ 28,330	\$ 3,540
10th Percentile Wage	\$ 18,890	\$ 17,200	\$ ( 1,690)



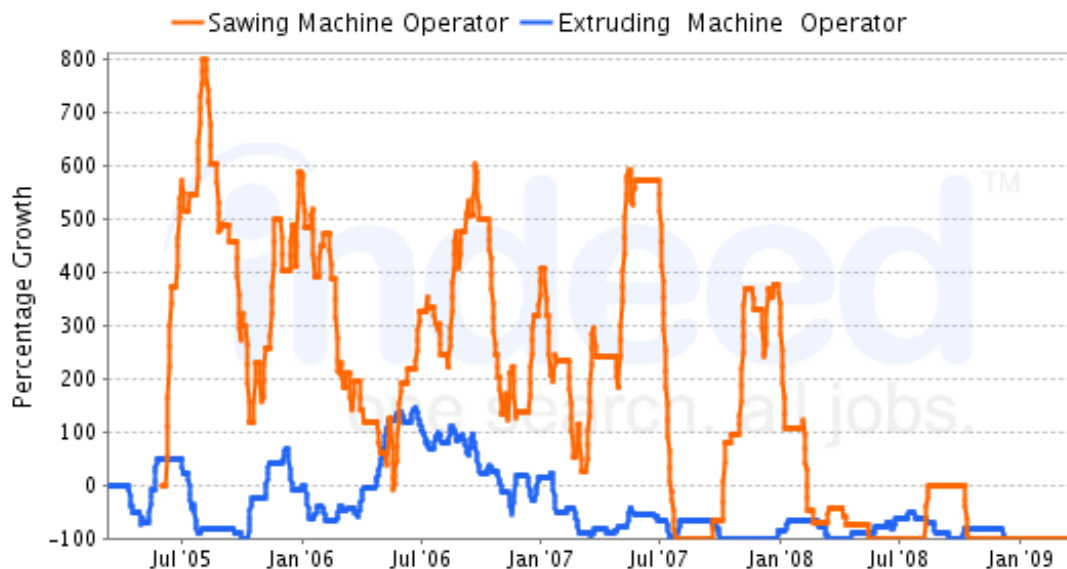
25th Percentile Wage	N/A	N/A	N/A
75th Percentile Wage	\$ 29,970	\$ 35,290	\$ 5,320
90th Percentile Wage	\$ 35,380	\$ 44,260	\$ 8,880
Mean Wage	\$ 25,920	\$ 29,370	\$ 3,450
Total Employment - 2007	700	260	-440
Employment Base - 2006	765	272	-493
Projected Employment - 2016	706	252	-454
Projected Job Growth - 2006-2016	-7.7 %	-7.4 %	0.4 %
Projected Annual Openings - 2006-2016	15	5	-10

### National Job Posting Trends

Trend for Sawing Machine Setters, Operators, and Tenders, Wood

Trend for Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

### Job Trends from Indeed.com



Data from [Indeed](http://Indeed.com)

### Recommended Programs

Machinist/Machine Technologist

Machine Tool Technology/Machinist. A program that prepares individuals to apply technical knowledge and skills to plan, manufacture, assemble, test, and repair parts, mechanisms, machines, and structures in which materials are cast, formed, shaped, molded, heat treated, cut, twisted, pressed, fused, stamped or worked.



Institution	Address	City	URL
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Central Maine Community College	1250 Turner St	Auburn	<a href="http://www.cmcc.edu">www.cmcc.edu</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Eastern Maine Community College	354 Hogan Rd	Bangor	<a href="http://www.emcc.edu">www.emcc.edu</a>
Kennebec Valley Community College	92 Western Ave	Fairfield	<a href="http://www.kvcc.me.edu">www.kvcc.me.edu</a>
Kennebec Valley Community College	92 Western Ave	Fairfield	<a href="http://www.kvcc.me.edu">www.kvcc.me.edu</a>
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>
Southern Maine Community College	2 Fort Road	South Portland	<a href="http://www.smccME.edu">www.smccME.edu</a>

## Sheet Metal Worker

Sheet Metal Technology/Sheetworking. A program that prepares individuals to apply technical knowledge and skills to form, shape, bend and fold extruded metals, including the creation of new products, using hand tools and machines such as cornice brakes, forming rolls, and squaring shears.

Institution	Address	City	URL
Northern Maine Community College	33 Edgemont Dr	Presque Isle	<a href="http://www.nmcc.edu">www.nmcc.edu</a>

### Maine Statewide Promotion Opportunities for Sawing Machine Setters, Operators, and Tenders, Wood

O*NET Code	Title	Grand TORQ	Job Zone	Employment	Median Wage	Difference	Growth	Annual Job Openings
51-7041.00	Sawing Machine Setters, Operators, and Tenders, Wood	100	2	700	\$24,790.00	\$0.00	-8%	15
51-4121.06	Welders, Cutters, and Welder Fitters	91	2	1,610	\$38,030.00	\$13,240.00	7%	49
51-4034.00	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	91	3	110	\$34,350.00	\$9,560.00	-9%	2
51-9041.00	Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders	90	2	260	\$28,330.00	\$3,540.00	-7%	5
51-9196.00	Paper Goods Machine Setters, Operators, and Tenders	90	2	910	\$38,230.00	\$13,440.00	-26%	23



53-7063.00	Machine Feeders and Offbearers	88	1	480	\$26,820.00	\$2,030.00	-22%	9
51-2031.00	Engine and Other Machine Assemblers	88	3	20	\$29,010.00	\$4,220.00	-45%	1
51-9032.00	Cutting and Slicing Machine Setters, Operators, and Tenders	88	2	710	\$31,350.00	\$6,560.00	-23%	12
51-5011.00	Bindery Workers	87	2	350	\$26,130.00	\$1,340.00	-20%	5
51-9191.00	Cementing and Gluing Machine Operators and Tenders	87	1	80	\$27,620.00	\$2,830.00	-15%	2
51-2021.00	Coil Winders, Tapers, and Finishers	87	2	90	\$31,910.00	\$7,120.00	-53%	1
51-4022.00	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	87	2	20	\$28,330.00	\$3,540.00	-18%	1
51-4071.00	Foundry Mold and Coremakers	87	2	20	\$25,420.00	\$630.00	0%	1
51-5021.00	Job Printers	86	3	140	\$31,890.00	\$7,100.00	-10%	2
51-5023.00	Printing Machine Operators	86	2	790	\$29,710.00	\$4,920.00	-3%	18

### Top Industries for Extruding, Forming, Pressing, and Compacting Machine Setters, Operators, and Tenders

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Rubber product manufacturing	326200	18.33%	14,883	10,510	-29.39%
Cement and concrete product manufacturing	327300	11.55%	9,375	10,176	8.55%
Plastics product manufacturing	326100	8.23%	6,685	7,086	6.00%
Glass and glass product manufacturing	327200	5.04%	4,093	3,571	-12.76%
Clay product and refractory manufacturing	327100	4.14%	3,358	3,075	-8.41%
Resin, synthetic rubber, and artificial synthetic fibers and filaments manufacturing	325200	3.99%	3,237	2,599	-19.73%
Converted paper product manufacturing	322200	3.67%	2,982	2,502	-16.08%
Pharmaceutical and medicine manufacturing	325400	3.01%	2,444	3,080	26.03%
Animal slaughtering and processing	311600	2.87%	2,329	2,658	14.13%
Soap, cleaning compound, and toilet preparation manufacturing	325600	2.17%	1,763	1,694	-3.92%
Veneer, plywood, and engineered wood product manufacturing	321200	2.10%	1,703	1,854	8.89%



Bakeries and tortilla manufacturing	311800	1.66%	1,350	1,379	2.15%
Sugar and confectionery product manufacturing	311300	1.59%	1,292	1,088	-15.77%
Pulp, paper, and paperboard mills	322100	1.56%	1,265	877	-30.64%
Other chemical product and preparation manufacturing	325900	1.36%	1,106	870	-21.34%

### Top Industries for Sawing Machine Setters, Operators, and Tenders, Wood

Industry	NAICS	% in Industry	Employment	Projected Employment	% Change
Other wood product manufacturing	321900	26.55%	17,269	17,901	3.66%
Sawmills and wood preservation	321100	25.90%	16,845	14,856	-11.81%
Veneer, plywood, and engineered wood product manufacturing	321200	12.25%	7,969	9,546	19.78%
Self-employed workers, primary job	000601	7.11%	4,624	5,419	17.19%
Wood kitchen cabinet and countertop manufacturing	337110	5.97%	3,881	4,726	21.79%
Household and institutional furniture manufacturing	337120	5.22%	3,395	2,842	-16.30%
Office furniture (including fixtures) manufacturing	337200	3.32%	2,159	2,233	3.43%
Lumber and other construction materials merchant wholesalers	423300	2.03%	1,317	1,664	26.35%
Building material and supplies dealers	444100	1.42%	922	1,296	40.57%
Employment services	561300	1.09%	708	985	39.22%
Self-employed workers, secondary job	000602	0.90%	584	640	9.51%
Motor vehicle parts manufacturing	336300	0.25%	163	143	-12.42%
Motor vehicle body and trailer manufacturing	336200	0.24%	157	169	7.63%
Management of companies and enterprises	551100	0.12%	80	102	26.80%